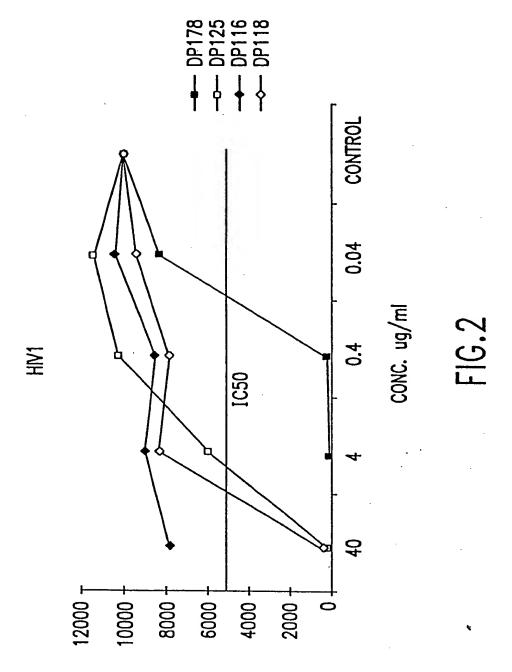




HIV1LAI (DP-178; SEQ ID NO.:1)	HIV1LAI (DP-178; SEQ ID NO.:1) YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF
HIV1SF2 (DP-185; SEQ ID NO.:3)	HIV1SF2 (DP-185; SEQ ID NO.:3) YTNTIYTLLEESQNQQEKNEQELLELDKWASLWNWF
HIVIRF (SEQ ID NO.:4)	YTGIIYNLLEESQNQQEKNEQELLELDKWANLWNWF
HIVIMN (SEQ ID NO.:5)	YTSLIYSLLEKSQTQQEKNEQELLELDKWASLWNWF
HIV2ROD (SEQ ID NO.:6)	LEANISKSLEQAQIQQEKNMYELQKLNSWDIFGNWF
HIV2NIHZ (SEQ ID NO.:7)	LEANISQSLEQAQIQQEKNMYELQKLNSWDVFTNWL
DP180 (SEQ ID NO.:2)	SSESFTLLEQWINNWKLQLAEQWLEQINEKHYLEDIS
DP118 (SEQ ID NO.:10)	QQLLDVVKRQQEMLRLTVWGTKNLQARVTAIEKYLKDQ
DP125 (SEQ ID NO.:8)	CGGNNLLRAIEAQQHLLQLTVWGIKQLQARILAVERYLKDQ

DP116 (SEQ ID NO.:9)

REVERSE TRANSCRIPTASE UNITS



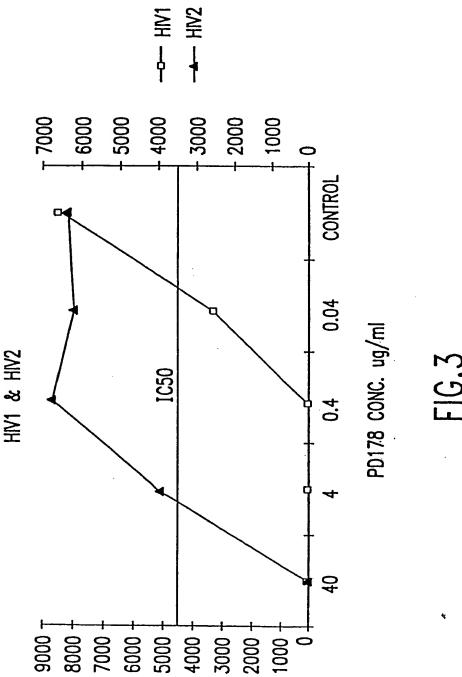


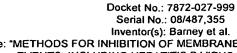
Serial No.: 08/487,355
Inventor(s): Barney et al.
Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"

Docket No.: 7872-027-999



Docket No.: 7872-027-999





Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"



Number	of Sync	evtia	/well:	concer	ntration	n in un/o	nl (micro	arams/ml)	
	<u> </u>	<u> </u>				111 / 119/1	m (mrero	gr unsymr j	
DP178	10	5	1	0.2	0.1	0.05	0.025	0.0125	Control
Syncylia	•	•	_		_	_	_	_	
HIVILAI	0	0	0	0	0	0	0	0	67
HIVIMN	0	0	0	0	0	ND	ND	ND	34
HIV1RF	0	0	0	0	0	ND	ND	- ND	65
HIV1SF2	0	0	0	0	0	ND	ND	ND	58
DP125	10	5	1	0.2	0.1	0.05	0.025	0.0125	Control
Syncytia									17.71
HIVILAI	0	0	54	69	80	75	79	82	67
HIVIMN	0	0	30	36	ND	ND	ND	ND	34
HIVIRF	0	0	67	63	ND	ND	ND	ND	65
HIV1SF2	0	0	9	66	ND	ND	ND	ND	58
DP116	10	5	1	0.2	0.1	0.05	0.025	0.0125	Control
Syncylia						-			
HIVILAI	75	ND	ND	ND	ND	ND	ND	ND	67
HIVIMN	35	ND	ND	ND	ND	ND	ND	ND	34
HIVIRF	81	ND	ND	ND	ND	ND	ND	ND	65
HIV1SF2	81	ND -	ND	ND	ND	ND	ND	. ND	58
								• • • • • • • • • • • • • • • • • • • •	

FIG.4A

DP180 Syncylia	40	20	10	5	2.5	1.25	0.625	0.3125	Control
HIVILAL	50	>45	>45	>45	>45	>45	>45	>45	58
DP185	40	20	10	5	2.5	1.25	0.625	0.3125	Control
Syncylia HIV1LAI	0	0	0	0	0	0	0	ND	60

FIG.4B

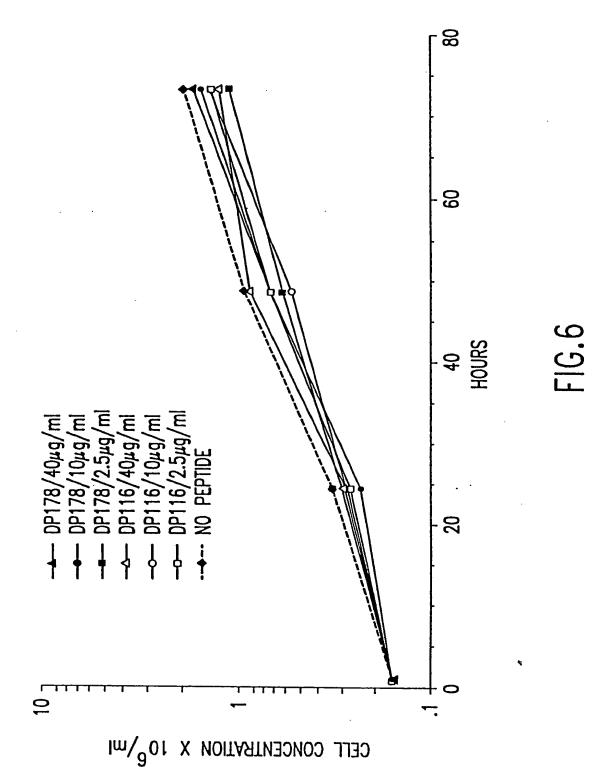


						·		
				HIV1				
	Number	of	Syncyt	ia/well:	conce	ntration	in ng/ml	(nanograms/ml)
DP178	20	10	5	2.5	1.25	0.625	0.3125	Control
Syncylia HIV1	0	0	0	0	0	14	20	48
DP116	20	10	5	2.5	1.25	0.625	0.3125	Control
Syncylia HIV1	ND	48	ND	ND	ND	ND	ND	ND
				HIV2	<u> </u>			
<u>.</u>	Number	of	Syncyl	ia/well:	conce	ntration	in μg/ml	(micrograms/ml)
DP178	20	10	5	2.5	1.25	0.625	0.3125	Control
Syncylia HIV2	50	54	55	57	63	77	78	76
DP116	20	10	5	2.5	1.25	0.625	0.3125	Control
Syncylia HIV2	ND	58	ND	ND	ND	ND	ND	ND

FIG.5

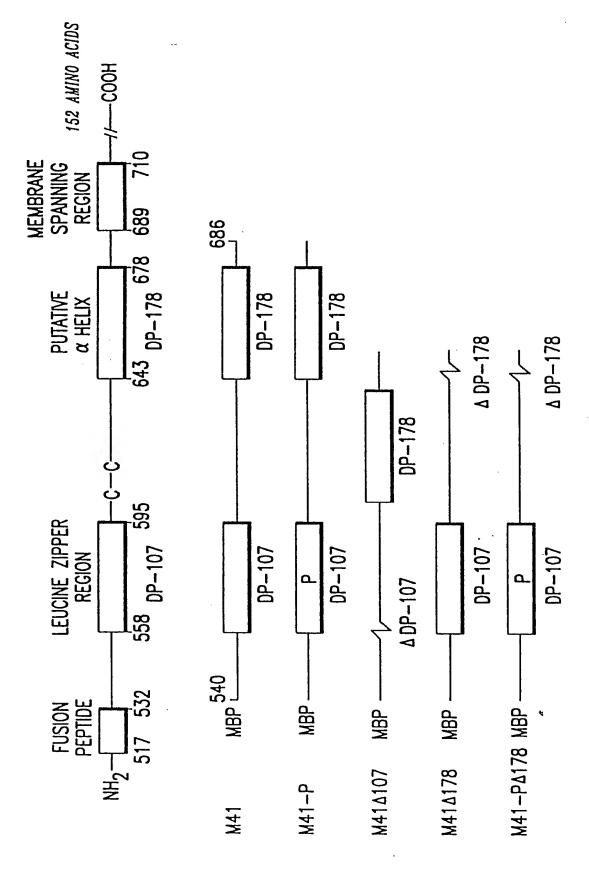
Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"



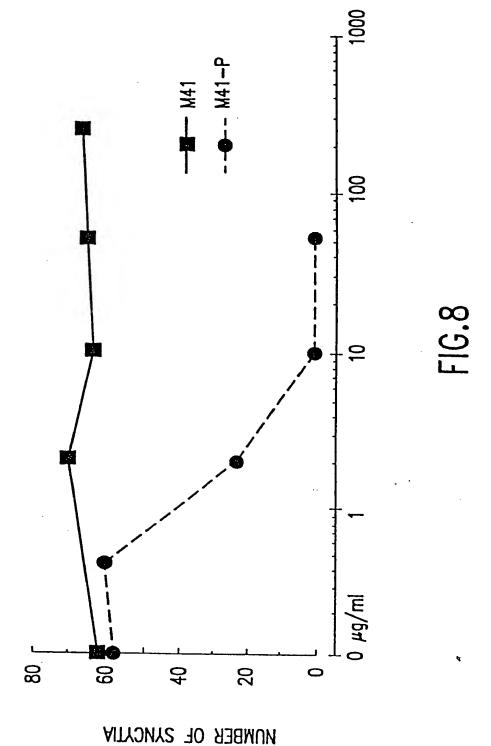
Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

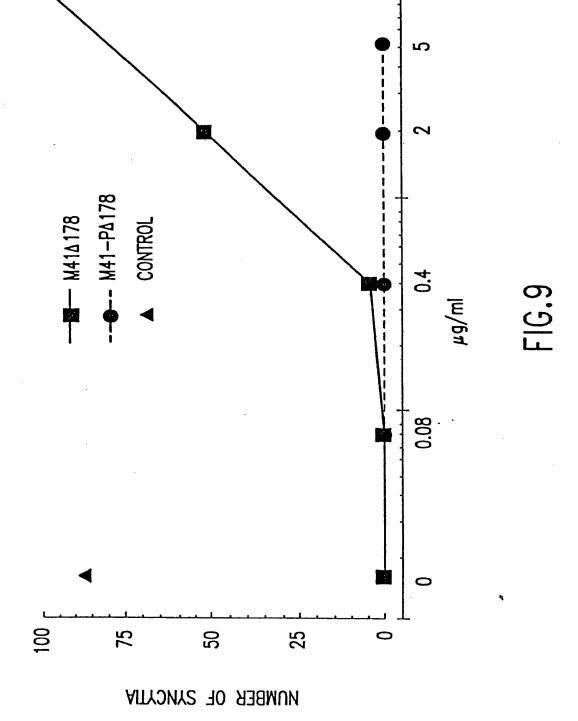


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Docket No.: 7872-027-999



Serial No.: 08/487,355
Inventor(s): Barney et al.
Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

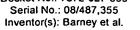




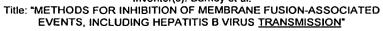
Inventor(s): Barney et al.

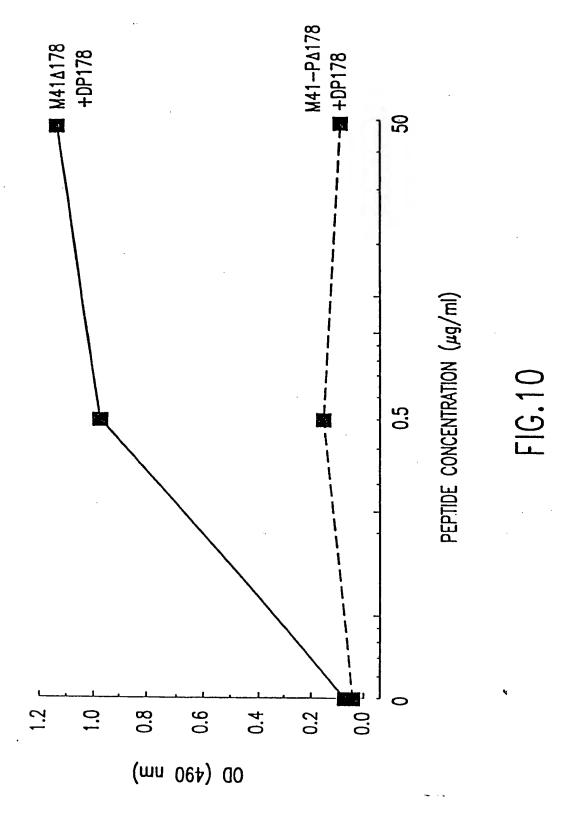
Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

Docket No.: 7872-027-999 Serial No.: 08/487,355 Docket No.: 7872-027-999

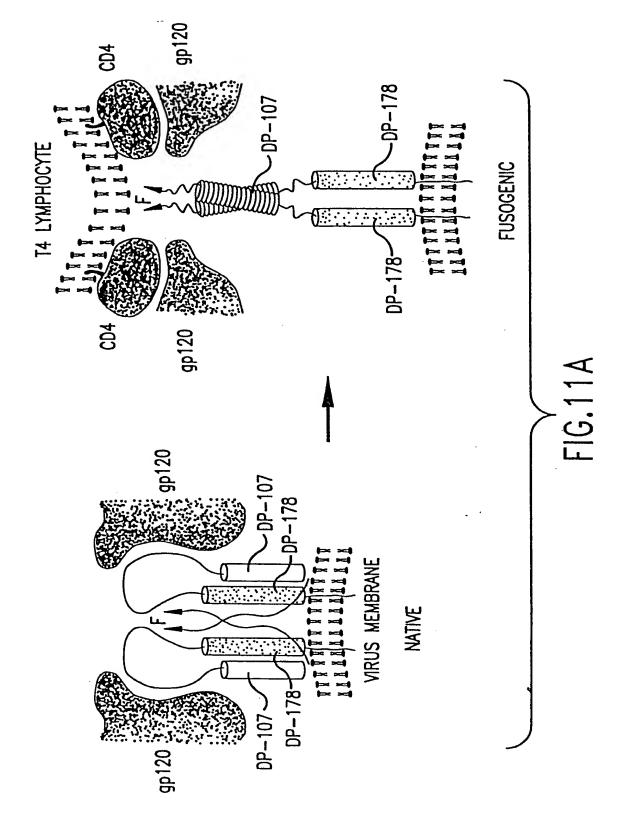




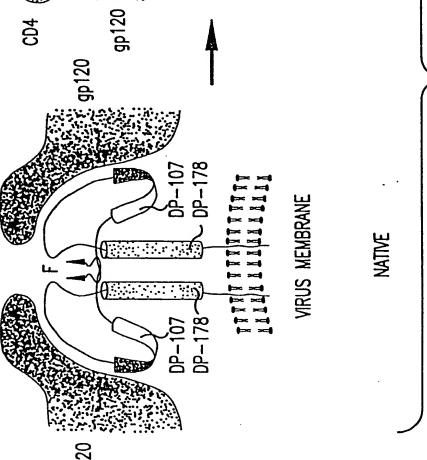








FUSOGENIC



Docket No.: 7872-027-999



Motifs		[LMNV] {CFGIMPIW}	[IKLT] {CFGHIMPRWMY}	[AILNV] {COFGHILPWMY}	[ELR] {ACFGAPVMY}	[FILIV] {ACFLMPIVM{
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	Sequence	GCN4 (qcn4 yeast)	C-FOS (fos_human)	C-JUN (tap1_human)	C-MYC (myo_human)	FLU LOOP 36



Docket No.: 7872-027-999 Serial No.: 08/487,355

Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

Motifs		[1LQT] {CF [MPSTY}	[1LQTV] {COF IMPST}	[ILOTV] {CDF IMPST}	[EKLNOV] {CDFKAPSVY}	[EKLNOV] {CFKNPS}	[EKLNQV] {CFKMPS}		[EKLOY] {ACFGMPRWMY}	[EKLOMY] CFGMPRVY ([EFKLCMI] {CFGMPKVI}	[EILNOSY] {ACFGMPRYMY}	[EILNOSWY] {CFGMPRVY}	(FETT MOCWY) (CECLORIVY)	[EF 1E1823H1] (SI SHE 1871)
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	Sequence	OP-107 (env_hv1bru)[1=0	OP-107 (env_hv1bru)L1=0	DP-107 (env_hv1bru)L1=0	o-107 (env_hv1bru)L2≐D	DP-107 (env_hv1bru)L2=D	D-107 (env_hv1bru)L2=D		-178 (env_hv1bru)Y1=A	DP-178 (env_hv1bru)Y1=A	⊃-178 (env_hv1bru)Y1=A	0-178 (env hv1hc11)Y1=0	DP-178 (cm.t-misco): 5	0-11/0 011/1-11/10 0/1	UP-1/8 (env_hvlbru)Yl=U
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Parent Motif Hybrid Motif:	' I	[LMN] {CFGINPTW}	N Q Q E K N E Q E L L E L D K W A S L W N W [EKLQY] {ACFGAPRYWY} {EKLANOVY] {CFGAPRY } N Q Q E K N E Q E L L E L D K W A S L W N W F [EFKLQMY] {CFGAPRYY} {CFGAPRYY} {EFKLANOWY] {CFGAPRYY}	ESONODE KNEDELLELDKWASLWNW [EILNOSY] {ACFGAPRYMY [EILMOSYY] {CFGAPRYMY } [CFGAPM] {CFGAPM } [CFGAPMY] {CFGAPRYMY } [CFGAPMY] {CFGAPMY } [CFGAPMY] {CFGAPMY } {CFGAP
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Sequence	⋖	<u>_</u>	⋖	<u>으</u>	C	⋖	0		0 A 0		0 A 0		<u> </u>	⋖	6		
OP-107 (env_hv1bru)L1=0	N N	= 	7 A 1	E A 0	O H C	0	E	9 ₩ /	×	0 10	A R	Y	V E R	<u> </u>	00	[1LQTV] {COF IMPST}	
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le: ˈ	METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATE
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Sequence CCN4 (gcn4 yeasl) DP-107 (env_hv1bru)L1=D DP-178 (env_hv1bru)Y1=A	M X Q L E D K V E E L L S K N N N L L R A I E A Q Q H L L Y T S L I M S L I E E S Q N Q		X X X	A >	<u> </u>	N S S	X J Z	A D A D A D A D D A D D A D D A D D A D D A D D A D D A D D A D D A D D A D D A D D A D D A D D A D		~ ~ ~ ~	C C C	A X J		1	_	L A S	A V E	2 ×	∀ <u>L</u>	X D		[LIANV] {CFGIAPTM} [ILQTV] {CDFIAPST} [EFKLCAYY] {CFGAPRYY}	[EFIKLMAQIVMY] {GFIRP}
GCN4 (gcn4 yeast) DP-107 (env_hv1bru)L1=D DP-178 (env_hv1bru)Y1=D	MKQLEDKVEELLSKN NNLLRAIEAOQHLL YTSLIHSLIEES	— — — —	D K R A S L	<u> </u>	S A C	 	<u> </u>	N Y H L E N E V A R L K K L L Q L T V W G I K Q L Q A R I L A V E R Y L K D O S Q N Q Q E K N E Q E L L E L D K W A S L W N W F	O	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Z Z Z	<u> </u>		> 3	S S	≥=	× × • × ×	<u>ه لد</u>	[LIAN] {CFCIAPTM} {ILQTV] {CDFIAPST} [EFILIASSM'] {CFGAPRVY}	[EFILMACRSTWY] {CFIAP}
GCN4 (gcn4 yeast) DP-107 (env_hv1bru)L2=D DP-178 (env_hv1bru)Y1=A	M K Q L E D K V E E L L S K N N N L L R A 1 E A Q O H L L Q Y T S L I H S L I E E S Q N Q		A A A S	> U U	<u>поп</u>	N = S	200	N Y H L E N E V A R L K K L Q L T V W G 1 K Q L Q A R 1 L A V E R Y L K D Q Q O E K N E Q E L L E L D K W A S L W N W F	エトピ	20 10 11 11 11 11 11 11 11 11 11 11 11 11	<u> </u>	<u> </u>	<u> </u>	L A K D R L K L	× =	> × ×	<u> </u>	\ \ \ \ \ \	>=	0 0		[LIMNY] {CFGIMPTW} [EKLNOV] {CFNAPS} [EFKLOMY] {CFGNPRVY}	[EFKLIANOVAY] {CFIAP}
GCN4 (gcn4 yeast) DP-107 (env_hv1bru)L2=D DP-178 (env_hv1bru)Y1=D	M K Q L E D K V E E L L S K N N N L L R A 1 E A Q Q H L L Q Y T S L 1 H S L 1 E E S		0 K A 1 S L	<u>> ⊔ ←</u>	20 S		<u>X J M</u>	N Y H L E N E V A R L K K L Q L T V W G I K Q L Q A R I L A V E R Y L K D Q S Q N Q Q E K N E Q E L L E L D K W A S L W N W F		M S Q M		<u> </u>	<u> </u>	X X J		D A	± E	2 Y 1	_ _ _ _ _ _ _ _ _ _ _	O ≯ O N	٠	[LMN] {CFG1MPTM} [EKLNQV] {CFKMPS} [EF1LNQSMY] {CFGMPRVY}	[EFIKLMADSVMY] {CFMP}

Docket No.: 7872-027-999 Serial No.: 08/487,355

Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"



Hybrid Molif		• •		•						[AEF IKLIMACRSTVMY] {CFP}	(UV) (UE)
Parent Motif		[LMN] {CFC1HPTH}	[ILQTV] {COF IMPST}	[eklindy] {cfiaips}	[EFKLOHY] {CFGHPRVY}	[EFILNOSIM] {CFGIAPRVM}	[IKLT] {CFGHIMPRWMY}	[AILIN] {COFGHILPWIY}	[ELR] [ACFGMPVMY]	[FILTV] {ACFLMPTVW}	,
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	Sequence	14 yeast)	DP-107 (env_hv1bru)L1=0	OP-107 (env_hv1bru)L2=0	DP-178 (env_hv1bru)Y1=A Y T S L 1 H S L 1 E E S Q N Q C	OP-178 (env_hv1bru)Y1=0	C-FOS (fos_human)	C-JUN (tap1_human)	C-MYC (myo_human)		

Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

P-[LIV]-{P} (6)-[LIV]-{P} (6)-[LIV]
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P-{P} (2)-[LIV]-{P} (6)-[LIV]-{P} (6)-[LIV]
P-{P} (3)-[LIV]-{P} (6)-[LIV]-{P} (6)-[LIV]
P-{P} (5)-[LIV]-{P} (6)-[LIV]-{P} (6)-[LIV]
P-{P} (5)-[LIV]-{P} (6)-[LIV]-{P} (6)-[LIV]
P-{P} (7)-[LIV]-{P} (6)-[LIV]-{P} (6)-[LIV]
P-{P} (7)-[LIV]-{P} (6)-[LIV]-{P} (6)-[LIV]
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P-{P} (10)-[LIV]-{P} (6)-[LIV]-{P} (6)-[LIV]-

FIG. 19



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"

Fusion Y

YALLMOTI5Y

Peptide

4107x178x44

v....FLGFLG

A AGSTMGARSM TLTVQARQ ALL SGIVQQQ DP107-NNL

LRAIEAOOHL LOLTYWGIKO LOARILAYER YLKDO-DP107 QLLG* I WGC

4107x178x44

♥ALLMOTI5♥

LVS Coilcd-Coil

SGKLICT TAVP ♥WNASWS NKSLEQIWNN MTWM *E ♦ WDREINN DP178-

YTSLIHSL IEESONOOEK NEOELLELDK* WASLWNWF-DP178 NI

◆ Transmembrane Region ◆

TNWLWYIK → IF IMIYGGLYGLRIYFAYLSIY NRVRQGYS → PL

+P23LZIPC+

SFQTHLPTPR GPDR +PEGIEE EGGERDRDRS IRLVNGSLAL IWDDLRSL+ CL

▼ALLMOTI5▼

★107x178x4★

F *SYHRLRDLL LIVTRIVELL GRRGW *EALKY WWNLLOYWSO

ELKNSAYSLL NAT ↑ AIAVAEG TDRVIEVVQG A♥ CRAIRHIPR

RURQGLERIL L



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED

EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

Fusion

♥ALLMOTI5**♥**

Pcptidc

↑107x178x4↑

V....FLGEL

LGVGSAIAS GVA AVSKYLHIL EGEVNICKSA

+P1&12LZIPC+

LLSTNKAVYS LSNGYSYLTS KYLDLKNYID KQ♠♥ LL +PIVNKQ

↑107x178x4↑

SC ASISNIETY I+ EFOOKNNRLLEITREFSYNAGA VITPVSTMLTNSELLSL

+P1&12LZIPC+

♥ALLMOTI5♥

INDM →PI →TNDQ KKLMSNNVQI V→ RQQSYSI→ MS IIKEEVLAYV

VO♥ LPLYGVID TPCWKLHTSP LCTTNTKEGS NICLTRTDRG WYCDNAGSVS

FFPOAETCKV OSNRVFCDTM NSLTLPSEIN LCNVDIFNPK

YDCKIMTSKT DVSSSVITSL GAIVSCYGKT KCTASNKNRG

IIKTFSNGCDYVSNKGMDTV SVGNTLYYVN KQEGKSLYVK G

+P7, 12, & 23LZIPC+

↑107x178x4↑

▼ALLMOTI5 ▼

EPHNFYDPLVF *PSDE *FDASISOYNEKINOSLAF *I* RKSDELL*

◆Transmembrane Region ◆

LINVNA & GK STIN + IMITTI LIVILVILLS LIAVGLLLY Y C+

KARSTPVTLS KDQLSGINNI AFSN



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED

EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

Fusion

PeptideFLGFLG **VALLMOTI5 V** 4107x178x44

▼AAGTA MGAAA **★**TALTYQSQHLLAGILQQQKNLLAAY

4107x178x44 EAQ♠ QQM ♠LKLTIWGVKNLNARYTALEKYLEDQARLN♠ AWG♥ CA

LVS Coiled-Coil

∀ALLMOTI5∀ ★107x178x4★

WKOVCHTTVP WQWNNRTPDW ◆NNMT *WLE ◆WERQISYLEGNIT

+107x178x4+

TOLEEARAQEEKNLD* AYOKLSS* WSDFWSW* FDF *SKWLN *ILK

♦ Transmembrane Region ♦

IGFLDYLGIGLRLLYTY + YS + CIARVRQGYS PLSPQIIIIIHP WKGQPDNAEG

PGEGGDKRKN SSEPWQKESG TAEWKSNWCK RLTNWCSISS IWLYNS

♥ALLMOTI5♥

▼CLTL LVHLRSAFQY IQYGLGELKA AAQEAVVALA RLAQNAGYQIWL

ACRSAYRA IINSPRRVRQ GLEGILN

FIG. 22



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

4107x178x44

Fusion Peptide

▼ ALLMOTI5 ▼

LVS Coiled-Coil

.....EAG

YYYL

AGVALGVATA AQITAGIALHQ **SNLNAQAIO

SLRTSLEQSNKAIEEIREATQETYIÀ* YQGYQDYA VNNEL▼ VP

VALLMOTISY

4107x178x44

4P6 & 12LZIPC+

AMQHMSCELVGQRLGLRLLRYYTELLSIFGPSLRD *PISA **EISIOALIYAL

GGEHHKILEKLGYSGSD * MIAILESRGIKTKI * THVDLPGKF IILSISY

+P1 & 12LZIPC+

PTLSEVKGVIVHRLEAV SYNIGSQEWYTTVPRYIATNGYLISNFDESSCVFVS

ESAICSQNSL YPMSPLŁQQC IRGDTSSCAR TLVSGTMGNK FILSKGNIVA

NCASILCKCY STSTIINQSP DKLLTFIASD TCPLVEIDGA TIQVGGRQYP

LVS Coiled-Coil

YALLMOTI5

4P12 & 23LZIPC+

DMVYEGKVAL G *PAISLD *RL*DVGTNLGNALKKLDDAKVLI*

◆Transmembrane Region ◆

DSS+ NQILETYRRS ** SFN

*FGSLL SYPILSCIAL ALLLLIYCC *

K RRYQQTLKQH TKVDPAFKPD LTGTSKSYVR SL

FIG. 23



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

Fusion YALLMOTI5Y

Peptide ★107x178x4★ ★.....FIGAI IGSVALGVA TAAQITAASA LIQANQNAAN ★ILRLKESITA

TIEAVHEYTDGLSQLAYA♠ VG KM♥ QQFVNDQFNNTAQELDCIKITQQV

▼ALLMOTI5▼
GVELNLYLTELTTV FGPQITSPAL ▼TQLTIQALYNAGGNMDYLLTKLGVG

#P1 & 12LZIPC#
NNQLSSLIGSGLIT GN♥ #PILYDSQT QLLGIQVTLP SVGNLNNMRATYLET

LSVST TKGFASALVP KVVTQVGSVI EELDTSYCIE TDLDLYCTRI VTFPMSPGIY

SCLNGNTSAC MYSKTEGALT TPYMTLKGSV LANCKMTTCR CADPPGIISQ

♥ALLMOTI5♥

★107x178x4★

NYGEAVSLID RHSCN ★▼VLSLD GITLRLSGEF DATYQKNISI LDSQVIVTG

LVS Coiled-Coil

Trans-

*N LDISTELGNY NNSISNALDK LEESNSKLDK YNYKLTSTSA +LIT

+LIT* YL

membrane Region +

LTAISLVCGILSLV * * LACYLMY + KQKAQQKTLLWLGNNTLGQMRATTKM



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED **EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION**"

Fusion

YALLMOTISY

Peptide

♦ 107x178x4 ♦ *LVS Coiled-Coil*

.....FFGGY

★IG ▼TIALG *YATSAQITAAYALYEAKQARSDIEKLKE

<u>AIRDTNKAVOSVOSŠIGNLIVAIKSVO</u>* <u>DYVNKE</u>♥★ IVPSIARLGCEAAG

▼ALLMOTI5 **▼**

↑107x178x4↑

LQLGIALTQH *YSELTNIFGDNIGSLOEKGIKLOGIASLYRTNITEY*

♣P5 & 12LZIPC♣

IFTTSTVDKYDIYDLLFTESIKVRVIDVDLNDYSITLQVRL +PLLTRLLNTQIYR

VDSISYNI+ QNREWYI+ PLPSHIMTKGAFLGGADVKECIEAFSSYIC

PSDPGFVLNHEMESCLSGNISQCPRTVVKSDIVPRYAFVNGGVVANCITT

TCTCNGIGNRINQPPDQGVKIITHKECNTIGINGMLFNTNKEGTLAFYTP

YALLMOTISY

★107x178x4★

P6 & 23LZIPC

NDITLNNSVALD +PIDI +SIELN +KAKSDLEESKEWI+ RRSNQKL+

◆ Transmembrane Region ◆

DSIGNWHQSSTT

+IIIV + LIM IIILFIINYT II +

IIAVKYY R

IQKRNRVDQN DKPYVLTNK

FIG. 25



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

Fusion
Peptide
......GLFGAI AGFIENGWEGMIDGWYGFRHQNSEGTG

4107x178x44

VALLMOTI5V

LVS Coilcd-Coil

*Q *AADLKST *QAAIDQINGKLNRVIEKTNEKFHQIEKEFSEVEGRIQ

DLEKYYEDTKIDL* WSYNAELLYALENOHTI♠ DLT♥ DSEMNKLFEKTR

RQLRENAEEMGNGCFKIYHKCDNACIESIRNGTYDHDVYRDEALNNRFQIKG

VELKSGYKDWILWISFAISCFLLCVVLLGFIMWACQRGNIRCNICI

FIG. 26



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Docket No.: 7872-027-999 Serial No.: 08/487,355

Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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Docket No.: 7872-027-999 Serial No.: 08/487,355

Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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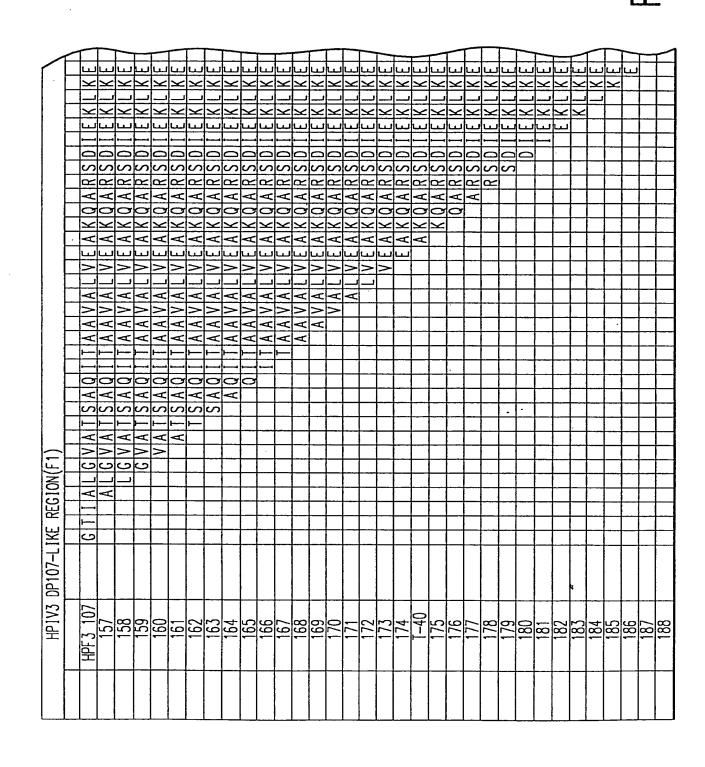
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Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"

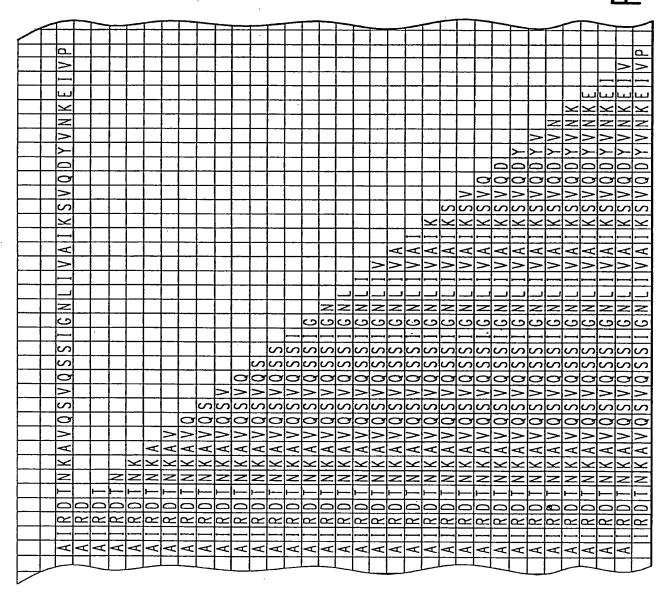
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Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"

FIG. 29B





Docket No.: 7872-027-999

Serial No.: 08/487,355
Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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158		574* 146*	+
150		707*	+
159		536*	+
161	_	390*	+
162	_	403*	+
161 162 163 164 165		123*	+
164		512 067+	
165		512.067* 742*	+++
166		14Z* 540+	_
166 167		540*	
107	<u>-</u>	215*	_
100		680* 137*	
168 169 170		15/*	
170		456*	
171		437*	
171 172 173	+	63*	
1/3	++	30*	
174 174 1-40 175 176	+	56*	++
1-40	l +/~		+++
1/5	+/-	110* 197.75*	++
1/6	_	197.75*	+++
17/	_	350*	+
1 1/8	++	30*	+
179		295*	_
180	-	732*	
181		929*	_
182		707*	
181 182 183		218.50*	++
\ 184	+	67.8*	+++
185	_	542*	_
186	_	613*	1
187		152*	_
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FIG.29C



Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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FIG. 79D



Docket No.: 7872-027-999

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(F1) (P)		3456712	N D I T L	NDITI	NDITI	NDITL	111	111	I I I	N N L	Z	S N	SN	S										*	
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8-LIKE REGION (F1)		3456712	YTPNDITI	YTPNDITI	TPNDITL	PNDITI	NOIT	0 1 1 1							00	01	02	03	04	05	90	07	80		01
178-LIKE REGION (F1)		3456712	YTPNDITI	NDITI	NDITI	NDITL	NOIT	0111		195 T N N N	196 L N N		198 N S		200	201	202	203	204	205	206	207	208		210
P178-LIKE REGION (F1)		3456712	YTPNDITI	YTPNDITI	TPNDITL	PNDITI	NOIT	0 1 1 1							200	201	202	203	204	205	206	207	208		210
OP178-LIKE REGION (F1)	-	3456712	YTPNDITI	YTPNDITI	TPNDITL	PNDITI	NOIT	0 1 1 1							200	201	202	203	204	205	506	207	208		210
3 DP178-LIKE REGION (F1)		3456712	TPNDITL	YTPNDITI	TPNDITL	PNDITI	NOIT	0 1 1 1							500	201	202	203	204	205	206	207	208		210
V3 OP178-LIKE REGION (F1)		3456712	YTPNDITI	YTPNDITI	TPNDITL	PNDITI	NOIT	0 1 1 1							200	201	202	203	204	205	206	207	208		210
PIV3 OP178-LIKE REGION (F1)		3456712	YTPNDITI	YTPNDITI	TPNDITL	PNDITI	NOIT	0 1 1 1							200	201	202	203	204	205	506	207	208		210
HPIV3 DP178-LIKE REGION (F1)		3456712	YTPNDITI	YTPNDITI	TPNDITL	PNDITI	NOIT	0 1 1 1							200	201	202	203	204	502	506	207	208		210



Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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FIG. 30B



Docket No.: 7872-027-999 Serial No.: 08/487,355

Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

1-269 IRUNCATED 201				E WII IRIRISINIO	E W I R R S N O K I D S I I	457.500UG/ML
T-626 205 MUTANT	11011811611	IKAKSD	LEESK	E W II KKISIN C	ILISITELNKAKSDLEESKEWINKISNQKLDSIIGNWH	209.589NG/ML
T-383 RMKQLEDKVEELLLSKLEW	LEWINRRINGKLDSI	K L D S I				NOT DONE
T-577 D Q Q 1 K Q Y K R L L D R L T T	I P L Y D G L R Q K D V I V S N Q E S N	KOVIV	SNOES	2		133.793UG/ML*
1-578 Y S E L T N I F G D N I G S L O E K	DEKGIKLOGIASLYRTNITE	IASLY	RINIT			107.177UC/AIL*
1-579 T S 1 T L Q V R L P L L T R L L	NITOITYRVDSISYNIONREWY	SISYN	I O N E	\ \ \ \		NOT DONE



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"

FUSION PEPTIDE

♥ALLMOTI5**♥**

★107x178x4★

.....RNKRGVFVLGFLGFLATAGSAMGAAS ♠♥ XXXXAQSRTLLAGIVQQQQQ

LLDVVKROOELLRLTVWGTKNLOTRVTAIEKYLKDQAOL♠NAWG♥ CAF

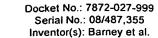
▼ALLMOTI5♥

*LVS PREDICTED COILED-COIL

RQVCHTTVPWPNASLTPDW *ND ▼TWQEWERKVDFLEENITALLEEAQIQQ

<u>♦107x178x4</u> EKNMY <u>♦ELQKLNSWD</u>* <u>VF</u>♥ <u>GNXXXXXXXXXXXXXXXXXXXXXXXX</u>

IYIVMLAKLRQGYRPVFSSPPSYFQXTHTQQDPALPTREGKEGDGGEGGGNSSWP WQIEYIHF





Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

MTRRRVLSVVVLLAALACRLGAQTPEQPAPPATTVQPTATRQQTSFPFRVCELSSHGDLFRFSSD

★ 107x178x4**★**

IOCPSFGTRENHTEGLLMVFKDNIIPYSF ♠ KVRSYTKIVTNILIYNGWYADSVTNRHE♠

EKFSVDSY ETDQMDTIYQ CYNAVKMTKD GLTRVYVDRD GVNITVNLKP TGGLANGVRR YASQTELYDA PGWLIWTYRT RTTVNCLITD MMAKSNSPFD FFVTTTGQTV EMSPFYDGKN KETFHERADS FHVRTNYKIV DYDNRGTNPQ GERRAFLDKG TYTLSWKLEN RTAYCPLQHW OTFDSTIATE TGKSIHFVTD EGTSSFVTNT TVGIELPDAF KCIEEQVNKT HEKYEAVQD RYTKGQEAIT YFITSGGLLL AWLPLTPRSL ATVKNLTELT TPTSSPPSSP SPPAPSAARG STPAAVLRRR RRDAGNATTP VPPTAPGKSL GTLNNPATVQ IQFAYDSLRR QINRMLGDLA RAWCLEQKRQ NMVLRELTKI NPTTVMSSIY GKAVAAKRLG DVISVSQCVP VNQATVTLRK

\$107x178x4\$

SMRVPGSETM CYSRPLVSFS FINDTKTYEG QLGTDNEIFL TKKMTEVCQA TSQYYFQSGN

LVS PREDICTED COILED COIL TM Potential GIFREYNFQAQNIAGLRKDLDNAVSN* GRNQ FVDGLGELMDSLGSVG QSITN

♣P12LZIPC♣

TM Potential

TM Potential

LVSTVGGLFSSLVSGFISF FK N &PFGGMLILVLVAGVVILVISL& TRRTRQMS

QQPVQMLYPG IDELAQQHAS GEGPGINPIS KTELQAIMLA LHEQNQEQKR AAQRAAGPSV ASRALQAARDRFPGLRRRRY HDPETAAALL GEAETEF



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

MMDPNSTSED VKFTPDPYQV PFVQAFDQAT RVYQDLGGPS QAPLPCVLWP VLPEPLPQGQ LTAYHVSTAP TGSWFSAPQP APENAYQAYA APQLFPVSDI TQNQQTNQAG GEAPQPGDNS TVQTAAAVVF ACPGANQGQQ LADIGVPQPA PVAAPARRTR KPQQPESLEE CDSELEI

@DNA BINDING@

★107x178X4★

+DIMERIZATION+

@KRY KNRVASRKCRAK

★FK@ Q

+LLQHYREVAAAKSSENDRLRLLLKQ♠

MCPSLDVD+ SI IPRTPDVLHE DLLNF

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"



FUSION PEPTIDE

♥ALLMOTI5♥

LVS_COILED-COIL

FAG

♥VVLAGAALGVATAAQITAGIALHQSML*NSOAIDNLRASLETTN

OAIEAIROAGOEMI*LAVQGVQDYINN♥ ELIPSMNQLSCDLIGQKLGLKLLRYYT

♣P23LZIPC♣ ♣P6,12LZIPC♣

★107X178X4★

♥ALLMOTI5♥

EILSLFGPSLRD ♣PISA ♠♥EISIQLSYALGGDINKV♣ LEKLGYSGGDL♣

♣P1.12LZIPC♣

LGILES♠ RGIKARI♥ THVDTESYFIVLSIAY ♣PTLSEIKGVIVHRLEGV♣ SY

NIGSQEWYTTVPKYVATOGYLISNFDESSCTFMPEGTVCSQNALYPMSPLLOECL

RGSTKSCARTLVSGSFGNRFILSQGNLIANCASILCKCYTTGTIINQDPDKILTYIAA

♣P23LZIPC♣

♣P12LZIPC♣

♥ALLMOTI5♥·

LVS COILED-COIL

DHCPVVEVNGVTIQVGSRRYPDAVYLHRIDLGP ♣P ▼IS *LERLDVGTNLGN

◆TRANSMEMBRANE REGION◆

<u>AIAKLEDAKELL</u> <u>ESSDOI</u>*L RSMK ◆GLSSTSIVYILI♥ <u>AVCLGGLIGIP</u>

<u>ALICCC</u>♦ RGRCNKKGEQVGMSRPGLKPDLTGTSKSYVRSL



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

Pre S1 and Pre S2
MGQNLSTSNPLGFFPDHQLDPAFRANTANPDWDFNPNKDTWPDANKVGAGAFG
LGFTPPHGGLLGWSPQAQGILQTLPANPPPASTNRQSGRQPTPLSPPLRNTHPQAM
QWNSTTFHQTLQDPRVRGLYFPAGGSSSGTVNPVLTTASPLSSIFSRIGDPALN

MAJOR SURFACE ANTIGEN(HBs)
FUSION
PEPTIDE

♣P12 & 23LZIPC♣

MENITSG FLG &PLL VLQAGFFLLTRILTI PQSLDSWWTSLNFLGGTTVCLG

♣P12 & 23LZIPC♣

QNSQSPTSNHSPTSCPPTC ♣PGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQGML♣

PVCPLIPGSSTTSTGPCRTCMTTAQGTSMYPSCCCTKPSDGNCTCIPIPSSWAFGKF

◆TRANSMEMBRANE REGION◆
LWEWASARFSWLS ◆LLYPFYQWFYGLSPTYWLSYI◆ WMMWYWGPSL

- **♦TRANSMEMBRANE REGION**
- **†YSILSPFLPLLPIFFCLWYYI**



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

FUSION ♥ ALLMOTI5 ♥ <u>\$107x 178x4</u>\$

PEPTIDE *LVS COILED COIL

AIQLIPLFVG LGI ♥TTAVSTGAAGLGVS <u>\$IT</u> *QYTKLSHQLISDY

QAISSTIQDLQDQVDSLAEVVLQ* NRRGLDLLTAE♠ QGGI♥

CLALQEKCCFYANKSGIVRDKIKNLQDDLERRRRQLIDNPFWTSFHG

FLPYVMPLLGPLLCLLLVLSFGPIIFNKLMTFIKHQIESIQAKPIQVHYH

TRANSMEMBRANE REGION RLEQEDSGGSYLTLT.....???????????????????????



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"

MKAQKGFTLI ELMIVVAIIG ILAAIAPGQ

★107x178x4★

▼ALLMOTI5**▼**

♦♥YODYTARTOVTRAVSEVSALKTAAESAILEGKEIVSSA♠ T♥

PK DTQYDIGFT

±107x178x4**±**

♥ALLMOTI5♥

≜♥ESTLLDGSGKSQIQVTDNQDGTVELYATLGKSSGS♠ AIKGAVITSR♥

KNDGV WNCKITKTPT AWKPNYAPAN CPKS

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

MNTLQKGFTL IELMIVIAIV GILAAVALPA YQDYTARAQV

SEAILLAEGQ KSAVTEYYLN HGIWP

★107x178x4★

♥<u>ALLMOTI5</u>**♥**

★*KDNTSAGVASSSSIKGKYVKEVKVENGVVTAT

MNSSNVNKEIQGKKLSLWAKRQDGSVKW♥

FCGQP VTRNAKDDTV TADATGNDGK IDTKHLPSTC RDNFDAS

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"

MKKTLLGSLI LLAFAGNVQA DINTETSGKV TFFGKVVENT

CKVKTEHKNL SVVLNDVGKN SLSTKVNTAM PTPFTITLQN

CDPTTANGTA NKANKVGLYF Y

★107x178x4★

♥ALLMOTI5♥

♦♥SWKNYDKENNFTLKNEOTTADYATNYNI◆

QLMESNGTKAISVVGKETE

DF MHTNNNGVAL NQTHPNNAHI SGSTQLTTGT NELPLHFIAQ

YYATNKATAG KVQSSVDFQI AYE

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

MNKKLLMNFF IVSPLLLATT ATDFTPVP

- **±**107x178x4**±**
- **♥ALLMOTI5♥**
- **♦**♥<u>LSSNOIIKTAKASTNDNIKDLLDWYSSGSDTFTNS</u>**♦**♥

EVLDNSL GSMRIKNTDG SISLIIFPSP YYSPAFTKGE KV

- **★107x178x4★**
- **<u>ADLNTKRTKKSOHTSEGTYIHFOISGVT**</u>

N TEKLPTPIEL PLKVKVHGKD SPLKYG

- **♣P12LZIPC♣**
- **♣**PKFDKKQLAISTLDFEIRHQLTQI**♣**

HGLYRSSDKT GGYWKITMND GSTYQSDLSK KFEYNTEKPP

INIDEIKTIE AEIN



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

♥ALLMOTI5**♥**

MKKTAFILLL FIALTLTTSP L

♥VNG

±107x178x4**±**

- *LVS PREDICTED COILED-COIL*
- *S ♠EKSEEINEKDLRKKSELQRNALSNLRQIY* YYNEKAITENKESDD♠

QFLENTLL♥ FKG FFTGHPW

- **±**107x178x4**±**
- **<u>AYNDLLYDLGSKDATNKYKGKKVDLYGAY**</u>

YGYQCAGGTPNKTACMYGGVTLHDN NRLTEEKKVP INLWIDGKQTTV

- **♣P12LZIPC**♣
- **♣**PIDKVKTSKKEVTVQELDL**♣** QARHYLHGK FGLYNSDSFGGKVQ

♣P12LZIPC♣

RGLIVF HSSEGSTVSY DLFDAQGQY ♣P DTLLRIYRDN KTINSENLHI♣

DLYLYTT



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS <u>TRANSMISSION</u>"

♥ALLMOTI5♥

MKKTAFTLLL FIALTLTTSP L ♥VNGS

±107x178x4**±**

♠EKSEEINEKDLRKKSELOGTALGNLKQIYYYNEKAKTENKESHD♠ Q♥

FLQHTILFKG FFTDHSWYND LLVDFDSKDI VDKYKGKKVDLYGAYY

GYQC AGGTPNKTAC MYGGVTLHDN NRLTEEKKVPINL WLDGKQNTV

<u> 107x178x4</u>

♥ALLMOTI5♥

♣P12LZIPC♣

♣P ♥L ♠ETVKTNKKNVTVOELDLOARRYL♣ OEKYNLYN♠

SDVFDGKVQR♥ GLIVF HTSTE

♣P23LZIPC♣

♣PSVNYDLFGAQGQYSNTLLRIYRDNKTINSENMHI**♣** DIYLYTS

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

MKNITFIFFILLASPLYANGDRLYRADSRPPDEIKRFRSLMPRGNEYFDRGT

♥ALLMOTI5**♥**

♥QMNINLYDHARGTQTGFVRYDDGYV

±107x178x4±

♦STSLSLRSAHLAGQYILSGYSLTIYIVI ANMFNVNDVISVY♥

SP HPYEQEVSAL GGIPYSQIYG WYRVNFGVID ERLHRNREYR

DRYYRNLNIA PAEDGYRLAG FPPDHQAWRE EPWIHHAPQG

CGDSSRTITG DTCNE

♥ALLMOTI5**♥**

▼ETQNLSTIYLREYQSKVKRQIFSDYQSEVDIYNRIRDEL**▼**



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

MMFSGFNADY EASSSRCSSA SPAGDSLSYY HSPADSFSSM GSPVNAQDFC TDLAVSSANF IPTVTAISTS PDLQWLVQPA LVSSVAPSQT RAPHPFGVPA PSAGAYSRAG VVKTMTGGRA

LVS PREDICTED COILED-COIL
QSIGRRGKVE QLSPEEEEKR RIRRE *RNKMA AAK

±107x178x4±

♥ALLMOTI5♥

♥CRNRRREL <u>★TDTLQAETDQLEDEKSALQTEIANLLKEKEKL</u>♥

EFILAAHR* PACKIPDDL GFPEEMSVAS LDLTGGLPEV
ATPESEEAFT LPLLNDPEPK PSVEPVKSIS SMELKTEPFD
DFLFPASSRP SGSETARSVP DMDLSGSFYA LPLLNDPEPK
PSVEPVKSIS SMELKTEPFD DFLFPASSRP SGSETARSVP
DMDLSGSFYA GSSSNEPSSD SLSSPTLLAL



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

SGWESYYKTEGDEEAEEQEENLEASGDYKYSGRDSLIFLVDASKA
MFESQSEDELTPFDMSIQCIQSVYISKIISSDRDLLAVVFYGTEKDKNS
VNFKNIYVLQELDNPGAKRILELDQFKGQQGQKRFQDMMGHGSDY
SLSEVLWVCANLFSDVQFKMSHKRIMLFTNEDNPHGNDSAKASRAR
TKAGDLRDTGIFLDLMHLKKPGGFDISLFYRDIISIAEDED

★107x178x4★

♥ALLMOTI5**♥**

LVS PREDICTED COILED-COIL

♥LRVH *FEE \LSKLEDLLRKVRAKETRKRALSRLKLKLNKDIV* ISV

GIYNLVQKAL♥ KPPPIKLYRETN♠ EPVKTKTRTFNTSTGGLLLPSDTKR

SQIYGSRQIILEKEETEELKRFDDPGLMLMGFKPLVLLKKHHLRPSLFVYPE ESLVIGS STLFSALLIKCLEKEVAALCRYTPRRNIPPYFVALVPQEEELDDQK IQVTPPGFQLVFLPFADDKRKMPFTEKIMATPEQVGKMKAIVEKLRFTYRS DSFENPVLQQHFRNLEALALDLME

♣PI2LZIPC♣

♣PEQAVDLTLPKVEAMNKRL**♣** GSLVDEFKELVYPPDYNPEGKVTKR KHDNEGSGSKRPKVEYSEEELKTHISKGTLGKFTVPMLKEACRAYGLKSG LKKQELLEALTKHFQD



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

GGGALSPQHSAVTQGSIIKNKEGMDAKS

★107x178x4★

♥ALLMOTI5♥

▼▲LTAWSRTLYTFKDYFYDFTREEWKLLDT AQQIVYRNV
MLENYKNLVSLGYQLT KPDVILRLEKGEEPWLVEREIHQETHPD
SETAFEIKSSVSSRSIFKDKQSCDIKMEGMARNDLWYLSLEEVWKCR
DQLDKYQENPERHLRHQLIHTGEKPYECKECGKSFSRSSHLIGHQKT
HTGEEPYECKECGKSFSWFSHLVTHQRTHTGDKLYTCNQCGKSFVH
SSRLIRHQRTHTGHKPYECPECGKSFRQSTHLILHQRTHVRVRPYECN
ECGKSYSQRSHLVVHHRIHTGLKPFECKDCGKCFSRSSHLYSHQRTH
TGEKPYECHDCGKSFSQSSALIVHQRIHTGEKPYECCQCGKAFIRKN
DLIKHQRIHVGAETYKCNQCGIIFSQNS

♣P23LZIPC♣

♣PFIVHQIAHTGEQFLTCGNQCGTALVNTSNLIGQTNHI**♣** RENAY



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Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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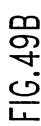
FIG. 48A



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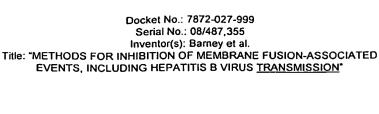


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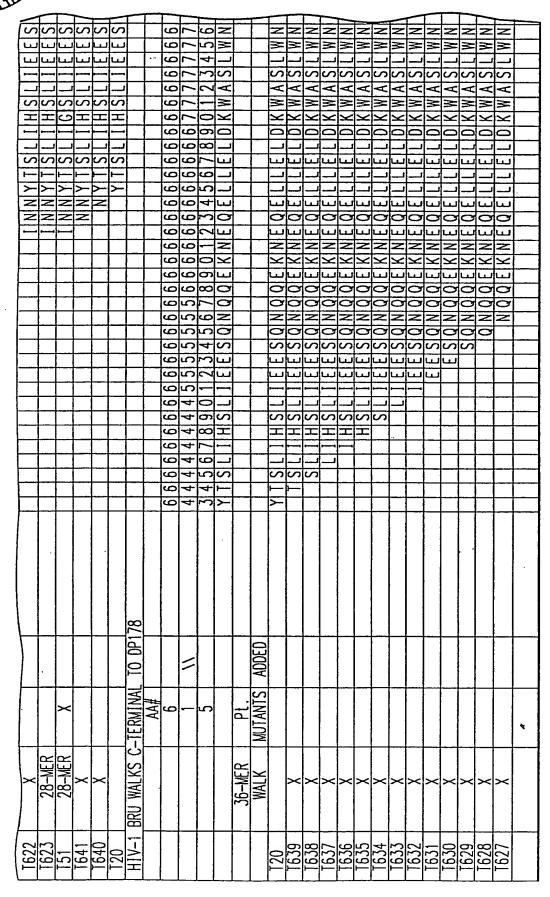


FIG.49C

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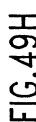
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Docket No.: 7872-027-999 Serial No.: 08/487,355

Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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FIG. 51B



Inventor(s): Barney et al.

Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

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FIG.51C



Title: "METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS, INCLUDING HEPATITIS B VIRUS TRANSMISSION"

174 P-L-L-V-L-Q-A-G-F-F-L-L-1-R-1-L-1-P-Q-S-L-D-S-M-M-T-S-L-N-F-L-G-G-T-T-V-C-L-G-Q-N-S-Q-S-P219

S-Q-S-X-Q-9-7-1-1-0-9-7-X-X-X-X-X-X-X-X-1-S-1-Y-Q-0-1-1-N-Q-1-1-N-Q-0-X-X-Q-X-X F-L-L-T-R-I-L-T-I-P-Q-S-L-D-S-W-W-T-S-L-N-F-L-G-G-T-T-V-C-L-G-Q-N-S F-F-L-L-1-R-1-L-1-1-P-Q-S-L-D-S-W-W-1-S-L-N-F-L-G-G-1-1-V-C-L-G-Q-N-A+G+F+F+L+L-1-R-1+L-1-1-P-Q-S-L-D-S-W-W-1-S+L-N+F+L+G-G-1-1-V-C-L-G+ Q-A-G-F-F-L-L-I-R-I-L-I-I-P-Q-S-L-D-S-W-W-I-S-L-N-F-L-G-G-I-I-V-C-L-G L-Q-A-G-F-F-L-L-T-R-I-L-T-I-P-Q-S-L-D-S-W-W-T-S-L-N-F-L-G-G-T-T-V-C-L V~L~Q~A~G~F~F~L~L~T~R~I~L~T~I~P~Q~S~L~D~S~M~W~T~S~L~N~F~L~G~G~T~T~V~C [-V-[-Q-A-G-F-F-L-L-T-R-]-L-T-I-P-Q-S-L-D-S-W-W-T-S-L-N-F-L-G-G-I-T-V L-L-V-L-Q-A-G-F-F-L-L-T-R-I-L-T-I-P-Q-S-L-D-S-W-W-T-S-L-N-F-L-G-G-T-I

FIG.52A

233 P-G-Y-R-W-M-C-L-R-R-F-I-I-F-L-F-I-L-L-L-C-L-I-F-L-L-V-L-L-D-Y-Q-G-M-L-P-V-C-P-L-I-P-G-S-S-T-T-S-T-G-P-C-R-T-C-M-T-T 290

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FIG.52B